UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,912	02/09/2001	Peter Lin	979642-600-001	9053

7590   03/01/2005

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EXAMINER
SHINGLES, KRISTIE D

ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/781,912	LIN ET AL.
		Examiner	Art Unit
		Kristie Shingles	2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>15 October 2004</u>.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-20</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>15 October 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant has amended claims 1, 7, 8, 10, 11 and 14.

Claims 1-20 are still pending.

Drawings

1.   The proposed drawing corrections filed on 10/15/2004 have been accepted by the Examiner. The corrections to the drawings will not be held in abeyance.

Abstract

2.   The proposed corrections to the abstract of the disclosure filed on 10/15/2004 have been accepted by the Examiner. The corrections to the specification will not be held in abeyance.

Claim Objections

3.   Per claims **1, 7, 10 and 14** the proposed typographic correction filed 10/15/2004 has been accepted by the Examiner. Correction of the claim language will not be held in abeyance.

Claim Rejections - 35 USC § 112

4.   Per claim **11**, the prior rejection under 35 U.S.C. 112, second paragraph has been withdrawn.

Response to Arguments

5.   Applicant's arguments filed 10/15/2004 have been fully considered but they are not

persuasive. Applicant's argument that the cited prior art, alone or in combination fails to teach

"mimicking of circuit-like connection from simple two-way messaging devices to computer

networks in order to facilitate secure and stable browsing sessions" is moot in view of the cited

prior art, *Verker et al*, thus the rejection is sustained.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7.   Claims **1-7** are rejected under 35 U.S.C. 102(b) as being anticipated by *Verkler et al*

(USPN 5,850,517).

    a.   **Per claim 1**, *Verkler et al* teach a system for providing two-way communication

of content between a wireless mobile communication device and a remote computer network,

comprising:

-   a wireless two-way messaging network further comprising (**col.3 lines 3-13; wireless network and communication**):

-   said wireless communication device (**col.3 lines 31-37; mobile devices function as mobile clients**);

-   a base station in communication with said wireless communication device (**a base station is an inherent fundamental component critical to the functionality of wireless mobile communication devices**);

- a gateway server in communication with said base station (**col.5 lines 19-30; message gateway performs functions of gateway server**);

- a network and layer framework for translating said communicated content between said wireless communication device and said base station (**Fig.1 and col.3 lines 40-67; a network and layer framework are inherent primary traits characteristic of a communication system/network, furthermore this feature is supported by the presence of an agent interfaced between the mobile client and the network**); and

- an intermediary computer system in communication with said wireless two-way messaging network and said remote computer network, said intermediary computer system further comprising: (**col.4 lines 27-38; server acts as intermediary computer system communicating with online servers and other networks**).

- means for effecting priority treatment of a specific connection between said wireless mobile communication device and said remote computer network by allocating dedicated resources of said intermediary computer system to enable said specific connection to mimic a circuit connection (**col.4 lines 1-61, col.6 lines 1-37, col.7 lines 24-38, col.8 lines 38-67 and col.9 lines 24-41; the agent device mimics a logical connection with the server by fooling the server into thinking that it is talking to the client furthermore, data is organized in a queue for sending**).

b.   **Per claim 2,** *Verkler et al* teach the system of claim 1, wherein said network and

layer framework comprises:

- a system layer (**col.5 lines 6-13; inherent in operable computer systems, furthermore a client computer system is disclosed within client application program and message manager**);

- an operating system framework layer (**col.5 lines 13-18; inherent in computer systems, furthermore client applications residing under the operating system layer is disclosed**);

- a user interface (**col.3 lines 20-24; client interface**); and

- a Message Transport Protocol stack (**col.6 lines 22-25 and col.7 lines 3-24; supports and allows for various transport protocols which comprises Message Transport Protocol**).

c.   **Per claim 3,** *Verkler et al* teach the system of claim 2, wherein said user interface

comprises a computer network browser (**col.3 lines 20-25; client interface allows for message**

transactions to be dispatched to the network which could therefore incorporate the use of a

network browser).

d.   **Per claim 4,** *Verkler et al* teach the system of claim 2, wherein said network and

layer framework interface further comprises a data encryption module (**col.7 lines 59-63;**

message gateway may apply encryption for data security).

e.   **Per claim 5,** *Verkler et al* teach the system of claim 1, wherein said intermediary

computer system further comprises:

- a first electronic queue of data communicated from said wireless two-way
  messaging network to said intermediary computer system (**col.3 lines 35-39;**
  client generates first electronic queue in the form of a request from the
  mobile device which is sent over the wireless network to the server via an
  agent);

- a plurality of data modules in communication with said first electronic queue
  (**col.5 lines 31-39; first electronic queue message/request takes the form of a**
  data structure which can comprise a plurality of data formats and/or
  modules recognizable to the server);

- an event handler in communication with said plurality of data modules (**col.8**
  lines 27-37; the message gateway generates events to be handled by the
  server);

- an application dispatcher in communication with said plurality of data modules
  and said event handler (**col.5 lines 40-49 and col.6 lines 44-48; agent acts as an**
  application dispatcher by forwarding client applications to the message
  gateway);

- a second electronic queue of data communicated from said intermediary computer
  system to said wireless two-way messaging network (**col.4 lines 1-11; server**
  communicates data to the wireless network and mobile device via an agent);
  and

- a content fetcher in communication with said application dispatcher and said remote computer network (**col.4 lines 27-38; server retrieves requested information for remote servers or networks**).

f.   **Per claim 6,** *Verkler et al* teach the system of claim 5, wherein said second queue further comprises means for Message Transport Protocol encoding (**col.7 lines 3-24; allows for different types of transport protocols encoding which comprises the Message Transport Protocol encoding**).

g.   **Per claim 7,** *Verkler et al* teach the system of claim 5, wherein said plurality of data modules comprises at least one of: a message validator; a session module; a wireless IP/IP mapper database; a data transformer; an encryption module; or a cache manager (**col.7 lines 50-63; message gateway capable of performing encryption and message authentication**).

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims **8-13, 15, 16 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Boyle et al* (USPN 6,665,711) in view of *Verkler et al* (USPN 5,850,517).

a.   **Per claim 8**, *Boyle et al* teach a method for providing two-way communication of

content between a wireless mobile communication device and a remote computer network via an

intermediary computer system, comprising the steps of:

- originating a request for data at said wireless mobile communication device and transmitting said data request through a network and layer framework to a two-way wireless messaging network **(col.2 lines 53-58; wireless mobile device originates a request and sends it to the wireless network of the link station through the link infrastructure)**;

- transmitting said request for data from said two-way wireless messaging network via a first electronic queue to said intermediary computer system in communication with said remote computer network **(col.2 lines 53-58; the request is forwarded from the link infrastructure to the server)**;

- retrieving the requested data from said remote computer network **(col.2 lines 55-58, col.9 lines 27-31, and col.6 lines 62-67; server retrieves requested data from web servers of remote computer networks)**;

- placing said retrieved data in a second queue **(col.2 lines 55-58; server holds or stores the retrieved data for transmittal to wireless mobile device—a queue can be implied)**;

- transmitting said retrieved data from said second queue to said wireless communication device via said two-way wireless messaging network **(col.2 lines 55-62; server forwards retrieved data to the mobile device via the link infrastructure and wireless network)**; and

- displaying said retrieved data at said wireless communication device **(col.6 lines 47-49 and col.9 lines 31-37; mobile device has a display screen for displaying data, nonetheless it is intuitive that once the mobile device has received the retrieved data that it will consequently be displayed on the device)**.

Yet *Boyle et al* fail to explicitly teach assigning priority to said retrieved data and

allocating dedicated resources of said intermediary computer system to said retrieved data based

on said assigned priority to mimic a circuit communication. However, *Verkler et al* disclose an

agent device that mimics a logical connection with the server by fooling the server into thinking

that it is talking to the client device and furthermore data is prioritized from the queue's

organization scheme (**col.4 lines 1-61, col.6 lines 1-37, col.7 lines 24-38, col.8 lines 38-67 and**

col.9 lines 24-41).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of *Boyle et al* and *Verkler et al* for the purpose of

prioritizing data in an organized queue data structure and allocating resource access with a

mimicked logical connection between the network devices; because mimicking a connection

permits transparent filtering or arbitration via an intermediate device between the source and

destination.

  b. **Per claim 9**, *Boyle et al* teach the method of claim 8, wherein said request for

data is a Uniform Resource Locator (**col.10 lines 4-19; user requests and subscriptions can**

take the form of URLs).

  c. **Per claim 10**, *Boyle et al* teach the method of claim 8, wherein said wireless

communication device includes a stored Wireless IP (**col.7 lines 39-43 and col.8 lines 36-44; a**

device ID is assigned to each mobile device which serves the function of a Wireless IP), and

further wherein the step of transmitting said data request through a network and layer framework

to a two-way wireless messaging network comprises the steps of:

- encoding said data request into Message Transport Protocol (**col.12 lines 44-67; data requests can be encoded into the determined/specific transport protocol comprising the Message Transport Protocol through use of PUSH PDU**);

- sending said Message Transport Protocol-encoded data request to one of a short messaging system stack and an email stack (**Fig.4, col.9 lines 38-51, col.10 lines 20-42 and col.12 lines 60-67; transport encoded data can be processed with the short message service and through the email system**); and

- transmitting said Message Transport Protocol-encoded data request and said Wireless IP to said intermediary computer system (**col.8 lines 47-49 and col.9 lines 1-8; device ID is held in the corresponding user account database maintained on the server**).

    d.   **Per claim 11,** *Boyle et al* teach the method of claim 10, wherein the step of transmitting said data request through a network and layer framework to a two-way wireless messaging network further comprises the steps of:

- generating a copy of said Message Transport Protocol-encoded data request (**col.12 lines 44-67**);

- placing said copy of Message Transport Protocol-encoded data request in said wireless communication device (**Fig.4, col.8 lines 47-49, col.9 lines 1-51, col.10 lines 20-42 and col.12 lines 60-67**);

- waiting a fixed duration for one of positive receipt confirmation and negative receipt confirmation from said intermediary computer system (**col.16 lines 4-25; timeout period for positive and negative receipt confirmations**);

- retrieving said copy of said Message Transport Protocol-encoded data request from said wireless communication device in response to said negative receipt confirmation (**col.3 lines 5-20, col.13 lines 1-9, col.15 lines 36-58 and col.16 lines 13-25; in response to negative/unsuccessful receipt confirmation another redelivery is attempted**);

- transmitting said retrieved copy of said Message Transport Protocol-encoded data request and said Wireless IP to said intermediary computer system (**col.2 lines 55-62, col.9 lines 27-31, col.11 line 21-col.12 line 43, col.13 lines 1-9, col.14 lines 17-33; server forwards retrieved data to the mobile device via the link server infrastructure and wireless network**);

- removing said copy of said Message Transport Protocol-encoded data request from said wireless communication device in response to said positive receipt confirmation from said intermediary computer system (**col.11 lines 37-55 and col.15 lines 51-58; upon successful delivery/positive receipt, the data gets removed from the queue list**).

e.   **Per claim 12,** *Boyle et al* teach the method of claim 8, wherein the step of

retrieving the requested data from said remote computer network further comprises the steps of:

- retrieving said request for data in said first electronic queue (**Abstract and col.9 lines 27-31; servers are used to retrieve data to fulfill requests**);

- validating said retrieved request for data for Message Transport Protocol coding and transmission completeness (**Fig.8A-8D; protocol encoding of data receipt acknowledgement**);

- analyzing said retrieved request for data to identify type of data requested (**Fig.8B; analyzes and determines data type i.e. binary or textual**);

- locating a data module suitable for retrieval of said requested data (**col.7 lines 5-17; obvious implied server characteristic—server uses specific data modules to perform designated function including retrieval**); and

- passing said data module to a content fetcher (**col.7 lines 19-33; obvious implied server characteristic exhibited by fetching/retrieval functions**).

f.   **Per claim 13,** *Boyle et al* teach the method of claim 12, further including the steps

of: transforming said retrieved data to an intermediary markup language (**col.5 lines 17-25;**

HTML serves as an intermediary markup language); and transforming said retrieved data to

a target markup language (**col.5 lines 64-col.6 lines 1-25 and col.7 lines 21-27; HDML serves**

as a target markup language).

g.   **Per claim 15,** *Boyle et al* teach the method of claim 8, wherein said second

electronic queue divides said retrieved data into a plurality of data packets (**Fig.8A-8C;**

retrieved data may be divided into fragments depending on the maximum message system

limit).

h.   **Per claim 16,** *Boyle et al* teach the method of claim 15, further including the step

of Message Transport Protocol-encoding each of said plurality of data packets (**Fig.8C and col.3**

lines 21-33; fragments are PUSH PDU-encoded).

i.   **Per claim 20,** *Boyle et al* teach the method of claim 8, further including the steps

of: encrypting one of said data request and said retrieved data prior to transmission (**col.16 lines**

53-63; link station can provide encryption of messages between it and mobile devices); and

decrypting said one of said data request and said retrieved data subsequent to transmission (**by**

virtue of encryption process, intuitively, decryption is an obvious implication in order to

provide usability of retrieved data).

10.   Claim **14** is rejected under 35 U.S.C. 103(a) as being unpatentable over *Boyle et al*

(USPN 6,665,711) in view of *Slaughter et al* (USPN 6,643,650).

Per claim 14, *Boyle et al* teach the method of claim 13 as applied above and

transforming said retrieved data to an intermediary markup language and transforming said

retrieved data to a target markup language.   However, *Boyle et al* fail to teach that the specific

intermediary markup language is Extensible Markup Language (XML). Nevertheless, *Slaughter*

et al disclose the use of XML for expressing retrieved data (**Abstract**).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of *Boyle et al* and *Slaughter et al* to include the use

of XML as a means for data representation for the purpose of extending the capability of the

system to support additional standard text formatting languages.

11.   Claims **17-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Boyle et al* (USPN 6,665,711) in view of *Meyer* (USPN 6,700,902).

a.   **Per claim 17,** *Boyle et al* teach the method of claim 16 as applied above, further including the step of Message Transport Protocol-encoding each of said plurality of data packets. However, *Boyle et al* fail to teach wherein each of said plurality of data packets has a maximum length of 448 characters. Nevertheless, *Meyer* discloses a plurality of data packets that are dynamically sized such that their size is substantially close to and not greater that the maximum data packet size capable of being transferred, wherein the operational maximum length is determined by increasing or decreasing the stored data packet size until a successful transfer is determined (**col.5 lines 20-col.6 lines 1-21**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Boyle et al* and *Meyer* to provide for an increase of the maximum length of transferable data packets for the purpose of improving the wireless data packet transmission efficiency.

b.   **Per claim 18,** *Meyer* teaches the method of claim 17, wherein said step of transmitting said retrieved data from said second electronic queue to said wireless communication device via said two-way wireless messaging network is conducted using one of Short Messaging Service protocol, Simple Mail Transfer Protocol, and Simple Network Paging Protocol (**col.7 lines 48-65 and col.9 lines 4-45; the use of a variety of communication protocols for transmitting retrieved data, which comprises but is not limited to SMS, SMTP and SNPP**).

c.   **Per claim 19,** *Meyer* teaches the method of claim 17 as applied above, yet *Meyer*

fails to teach the method of claim 17, further including the step of retrieving a Wireless IP and

session for said retrieved data. Nevertheless, *Boyle et al* disclose in the method of claim 8 from

above and on the step of retrieving a Wireless IP and session for the retrieved data (**col.2 lines**

43-62 and col.7 lines 18-55).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of *Meyer* and *Boyle et al* in order to retrieve a

Wireless IP and session for the retrieved data for the purpose of identifying the mobile device

and its session for correlation with its corresponding requested/retrieved data. One skilled in the

art would have been motivated to generate the claimed invention with a reasonable expectation

of success.

Conclusion

12.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

      a.   *King et al* (U.S. 6,721,288) disclose improved techniques for reducing delays
            faced by users of mobile devices.
      b.   *Kloba et al* (U.S. 6,553,412) disclose a system, method, and computer program
            product for web content aggregation and development, and web content delivery
            to clients.
      c.   *Hussain* (U.S. 6,243,367) discloses systems and methods for providing a client-
            server architecture for CDMA base stations.
      d.   *Boyle et al* (U.S. 6,119,167) disclose pushing and pulling data in networks.
      e.   *Sheynblat et al* (USPN 6,677,894) disclose a method and apparatus for providing
            location-based information via a computer network.

13.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00.
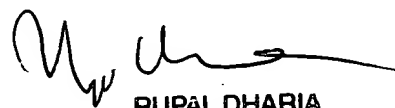
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner
Art Unit 2141

kds

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